

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-23 (Cancelled).

24. (New) An isolated polypeptide comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) having from 0 to 5 amino acid residues that are added, deleted or conservatively substituted.

25. (New) The polypeptide of Claim 24 comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that added.

26. (New) The polypeptide of Claim 24 comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that are deleted.

27. (New) The polypeptide of Claim 24 comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) with from 0 to 5 amino acid residues that are conservatively substituted.

28. (New) The polypeptide of Claim 24 comprising the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6).

29. (New) An isolated polypeptide comprising an extracellular region of the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6).

30. (New) The polypeptide of Claim 29, wherein the extracellular region comprises at least 10 contiguous residues.

31. (New) The polypeptide of Claim 29, wherein the extracellular region comprises the N-terminal fragment.

32. (New) The polypeptide of Claim 29, wherein the N-terminal extracellular region comprises at least 10 contiguous residues.

33. (New) A composition comprising the polypeptide of Claim 24 and a pharmaceutically acceptable carrier.

34. (New) A composition comprising the polypeptide of Claim 29 and a pharmaceutically acceptable carrier.

31 45. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 24. 20

32 46. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 35. 21

33 47. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 36. 22

34 48. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 37. 23

35 49. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 38. 24

36 50. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 39. 25

37 51. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 40. 26

38 52. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 41. 27

39 53. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR polypeptide of Claim 42. 28

40 54. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding the PF4AR amino acid sequence of Figure 5 (SEQ ID NO:6) having from 0 to 5 amino acid residues that are added, deleted or conservatively substituted. 40

41 55. (New) The nucleic acid molecule of Claim 54 operably linked to a promoter. 41  
Support at page 12, lines 17-26.

42 56. (New) An expression vector comprising the nucleic acid molecule of Claim 55 operably linked to control sequences recognized by a host cell transformed with the vector. 41

43 57. (New) A host cell transformed with the vector of Claim 56. 42

44 58. (New) A method of using the nucleic acid of Claim 54, comprising culturing a host cell that has been transformed with a vector comprising the nucleic acid molecule operably linked to control sequences recognized by the host cell under conditions that allow expression of the polypeptide. 40

45 59. (New) The method of Claim ~~58~~ further comprising recovering the polypeptide from the host cell. <sup>44</sup>

46 60. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding at least 10 contiguous amino acid residues from an extracellular domain of the PF4AR polypeptide of Figure 5 (SEQ ID NO:6). <sup>45</sup>

47 61. (New) The nucleic acid molecule of Claim ~~60~~, wherein the encoded polypeptide is an N-terminal extracellular domain. <sup>46</sup>

48 62. (New) The nucleic acid molecule of Claim ~~60~~ operably linked to a promoter. <sup>46</sup> <sup>45</sup>

49 63. (New) An expression vector comprising the nucleic acid molecule of Claim ~~59~~ operably linked to control sequences recognized by a host cell transformed with the vector. <sup>46</sup> <sup>49</sup>

50 64. (New) A host cell transformed with the vector of Claim ~~63~~. <sup>49</sup>

51 65. (New) A method of using the nucleic acid of Claim ~~60~~, comprising culturing a host cell that has been transformed with a vector comprising the nucleic acid molecule operably linked to control sequences recognized by the host cell under conditions that allow expression of the polypeptide. <sup>46</sup>

52 66. (New) The method of Claim ~~65~~ further comprising recovering the polypeptide from the host cell. <sup>51</sup>

53 67. (New) A method for determining the presence or absence of a PF4AR nucleic acid in a sample, comprising the steps of:

- (a) selecting a probe comprising at least 20 contiguous nucleotides from the nucleic acid sequence of Figure 5 (SEQ ID NO:5);
- (b) hybridizing the probe to any PF4AR nucleic acid present in the sample to form a probe/PF4AR nucleic acid complex;
- (c) detecting the presence or absence of the probe/PF4AR nucleic acid complex in the sample, and
- (d) determining the presence or absence of PF4AR nucleic acid in the sample based on the result of step (c).

54 68. (New) A method of amplifying a PF4AR nucleic acid in sample, comprising the steps of:

- (a) selecting an oligonucleotide primer having a 3' terminus consisting of at least 20 contiguous nucleotides selected from the nucleic acid sequence of Figure 5 (SEQ ID NO:5) or at least 20 contiguous nucleotides complementary to said primer;
- (b) hybridizing the oligonucleotide primer to a single strand of the PF4AR

nucleic acid in the sample, and

(c) performing a nucleic acid polymerase reaction wherein the hybridized oligonucleotide primer primes the synthesis of a second strand complementary to the single stranded nucleic acid to form an amplified nucleic acid.

55 69. (New) An antibody capable of binding to the PF4AR polypeptide of Figure 5 (SEQ ID NO:6) and that does not cross-react with other PF4AR polypeptides.

56 70. (New) The antibody of Claim 67, which is a polyclonal antibody.

57 71. (New) The antibody of Claim 67, which is a monoclonal antibody.

58 72. (New) The antibody of Claim 67, which is an IgG1 isotype antibody.

59 73. (New) An antibody capable of binding an extracellular region of the PF4AR polypeptide of Figure 5 (SEQ ID NO:6).

60 74. (New) The antibody of Claim 73, wherein the extracellular region is an N-terminal extracellular region.

61 75. (New) The antibody of Claim 73, wherein the extracellular region comprises at least 10 contiguous amino acid residues of Figure 5 (SEQ ID NO:6).

62 76. (New) The antibody of Claim 73, which is a polyclonal antibody.

63 77. (New) The antibody of Claim 73, which is a monoclonal antibody.

64 78. (New) The antibody of Claim 73, which is an IgG1 isotype antibody.

65 79. (New) The antibody of Claim 73, which is a monoclonal antibody.

66 80. (New) The antibody of Claim 73, which is an IgG1 isotype antibody.

67 81. (New) The antibody of Claim 73, which is a monoclonal antibody.

68 82. (New) The antibody of Claim 73, which is an IgG1 isotype antibody.

69 83. (New) A composition comprising the antibody of Claim 69 and a pharmaceutically acceptable carrier.

70 84. (New) A composition comprising the antibody of Claim 73 and a pharmaceutically acceptable carrier.

71 85. (New) A composition comprising the antibody of Claim 71 and a pharmaceutically acceptable carrier.

72 86. (New) A composition comprising the antibody of Claim 79 and a pharmaceutically acceptable carrier. 65

73 87. (New) A composition comprising the antibody of Claim 81 and a pharmaceutically acceptable carrier. 61